resulted in decisions beneficial to the protection of ground water. For example, they document the need and recommend measures to contain the movement of contaminants under the intensive ground water management strategies. Control strategies for the protection of ground water include licensing of well drillers and permitting of gas, oil, and water wells. The laws provide for the conservation of gas and oil as well as protection of water aquifers. The state's solid waste, toxic waste, and clean water laws regulate generators, transporters, and disposers of hazardous or toxic waste. The zero pollution strategy and the consistency of broad-based support for the program are among the program's most important features.

NEW YORK

Overview of Ground Water Resources

Six million of New York's 17.5 million residents rely on ground water for drinking supplies. Half of these live on Long Island, where ground water withdrawals for all uses total 486 million gallons per day. Upstate New York, which consists of the boroughs of all counties north of Bronx, Manhattan, and Richmond (Staten Island), is discussed in this section. Primary and principal aquifers in upstate New York consist of unconsoli-dated glacial stratified-drift and valley-fill deposits and consolidated clastic and carbonate sedimentary rocks, some of which have been metamorphosed. Characteristics of such aquifers are also described in Tables 3.8 and 3.9. Most portions of upstate New York are characterized by hilly or mountainous terrain, intersected by numerous valleys. The slopes and hilltops in this region are generally covered by relatively dense glacial till, bedrock is relatively near the land surface, and the amount of ground water that can be withdrawn is limited. Low-yielding "nonaquifer" areas make up about 90 percent of the total upstate land area. However, about 2 million upstate residents do rely on ground water in these areas for individual household supplies.

In contrast, highly permeable, high-yielding sand and gravel deposits are often found in the valley areas. The New York State Department of Environmental Conservation (DEC) has adopted the following terminology to identify these aquifers:

- "Primary" water supply aquifers are high-yielding aquifers that currently serve sizable municipal populations as their source of municipal supply. These underlie 18 discrete areas with populations ranging from 8,000 to 150,000. A total of roughly 700,000 people rely on municipal supplies in these areas.